



## ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

### AIR QUALITY TITLE V PERMIT

**COMPANY:** *Transwestern Pipeline Company*  
**FACILITY:** *Flagstaff Compressor Station*  
**PERMIT #:** *1000155*  
**DATE ISSUED:** *April 16, 1998*  
**EXPIRATION DATE:** *April 16, 2003*

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#### SUMMARY

This operating permit is issued to Transwestern Pipeline Company (TPC), a subsidiary of ENRON Corporation of Houston, Texas, the Permittee, for operation of their Flagstaff Compressor Station, located approximately 15 miles west of Flagstaff and 6 miles north on I-40, in Flagstaff, Coconino County, Arizona.

TPC provides natural gas transportation services for natural gas suppliers, and owns and operates a large natural gas pipeline network. The Flagstaff Compressor Station is one of several such stations that provide natural gas compression to the pipeline network. Compression is needed to maintain enough pressure in the pipeline to keep the natural gas flowing, and is accomplished at Flagstaff by **three natural gas-fired turbo-charged reciprocating engines** each driving a compressor unit. **Two natural gas-fired naturally aspirated reciprocating engines** power two generators which provide electricity to the compressor station. One water bath in-line natural gas-fired heater to be used for evaporating water that was collected and run through an oil/water separator. There are no air pollution control equipment installed on these engines at the Flagstaff Compressor Station. All the reciprocating engines were installed in 1966 and have been "grandfathered", hence they have not been subject to any Prevention of Significant Deterioration (PSD) review. The facility is permitted to operate 365 days, 24 hours a day. All records relating to this permit will be kept at the Flagstaff Compressor Station, Flagstaff, Arizona.

All terms and conditions of this permit are enforceable by the Administrator of the United States Environmental Protection Agency (U.S. EPA). This permit cites only the current state rules. The rules in the applicable State Implementation Plan (SIP) have been renumbered but the language in the current rules is either more stringent or same. A copy of a rule conformity test between the current rules and the applicable SIP is attached with the technical analysis.

Table 1 summarizes the requirements for operation of equipment emitting emissions in significant quantities. Activities generating insignificant quantities are listed in Attachment "E". The total estimated annual potential emissions emitted from this facility (excluding insignificant activities) are as follows. These figures are for information purposes only and are not enforceable limits.

Pollutants	Nitrogen Oxides	Carbon Monoxide	Volatile Organic Compounds	Formaldehyde	Sulfur Dioxide	Particulate Matter Total
Emissions (Tons Per Year)	1427.52	429.43	86.20	4.82	1.03	3.62

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**Transwestern Pipeline Company - Flagstaff Compressor Station**

**TABLE 1 Summary of Permit Requirements**

Emission Unit	Pollutants Emitted	Control Measure	Emission Limits / Standards	Monitoring /Recordkeeping	Reporting <sup>1</sup>	Testing Frequency/ Methods
<b><u>POINT SOURCES</u></b>  <b>P1. Dresser Rand Reciprocating Engine Stack 1</b> <b>P2. Dresser Rand Reciprocating Engine Stack 2</b> <b>P3. Dresser Rand Reciprocating Engine Stack 3</b> <b>P4. Waukesha Reciprocating Engine Stack 4</b> <b>P5. Waukesha Reciprocating Engine Stack 5</b>  <b>(Fuel -Natural Gas)</b> [A.A.C. R18-2-702 and 719]	PM	No controls installed	$E = 1.02 Q^{0.769}$ lb/hr	--	--	--
	So <sub>x</sub>	No controls installed	Sulfur - <0.8% by weight Fuel - Use only pipeline quality natural gas	Daily sulfur content of fuel OR Keep copy of FERC-approved Tariff agreement where total sulfur content < 0.8 percent by weight	Any daily period when sulfur > 0.8% OR Any change in Tariff agreement relating to sulfur content and lower heating value of fuel within 30 days	--
	Nox, CO, VOC, HAPs	No controls installed	**	Dates and number of hours of operation of each reciprocating engine.	Dates and number of hours of operation of each reciprocating engine reported semi-annually.	One time on each engine for NOx and CO within 6 months of permit expiration if engine is operated for 15 cumulative days. Methods 10 and
	Opacity	No controls installed	< 40% for any period greater than 10 consecutive seconds except for the first 10 minutes when starting cold.	--	--	--

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Emission Unit	Pollutants Emitted	Control Measure	Emission Limits / Standards	Monitoring /Recordkeeping	Reporting <sup>1</sup>	Testing Frequency/ Methods
<b>P6. Inline-heater Stack 6</b> <b>Stack 6</b> <b>(Fuel - Natural gas)</b> [A.A.C. R18-2-702 and 724]	Opacity	No controls installed	< 15%	--	All 6-minute periods in which the opacity of any plume or effluent from the inline-heater exceeds 15%	--
<b><u>FUGITIVE SOURCES</u></b>						
<b>F1. Non-point Sources</b>						
a. Driveways, parking lots, and open areas	Opacity	Gravel	< 40%	Maintain gravel; Date of graveling.	--	--
b. Unused open areas [A.A.C. R18-2-604.A]	Opacity	Native vegetation	< 40%	Dates of fresh vegetation added	--	--
c. Open area construction, reparation, etc. and earth excavation [A.A.C. R18-2-604.A]	Opacity	Wetting agent or dust suppressant	< 40%	Date and type of activity. Type of control used.	--	--
d. Roadway construction, repair or reconstruction [A.A.C. R18-2-605.A]	Opacity	Wetting agent or dust suppressant	< 40%	Date and type of activity. Type of control used.	--	--
e. Material transportation [A.A.C. R18-2-605.B]	Opacity	Covering, dust suppressant or wetting agent	< 40%	Date and type of activity. Type of control used.	--	--

\*\* No applicable limits established

-- Not required

NOTE: HAP's are emitted in trace quantities;

1. Semiannual compliance certifications required for all permitted equipment;

**ATTACHMENT "A": GENERAL PROVISIONS**

Air Quality Control Permit No. Permit No. 1000155

For

***TRANSWESTERN PIPELINE - Flagstaff Compressor Station***

**I. PERMIT EXPIRATION AND RENEWAL** [A.R.S. § 49-426.F, A.A.C. R18-2-304.C.2, and 306.A.1]

- A. This permit is valid for a period of five years from the date of issuance of the permit.
- B. The permittee shall submit an application for renewal of this permit at least 6 months, but not more than 18 months prior to the date of permit expiration.

**II. COMPLIANCE WITH PERMIT CONDITIONS** [A.A.C. R18-2-306.A.8]

- A. The permittee shall comply with all conditions of this permit including all applicable requirements of Arizona air quality statutes and the air quality rules. Any permit noncompliance constitutes a violation of the Arizona Revised Statutes and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or for denial of a permit renewal application. In addition, noncompliance with any federally enforceable requirement constitutes a violation of the Clean Air Act.
- B. Need to halt or reduce activity is not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

**III. PERMIT REVISION, REOPENING, REVOCATION AND REISSUANCE, OR TERMINATION FOR CAUSE** [A.A.C. R18-2-306.A.8.c and 321]

- A. The permit may be revised, reopened, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination; or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- B. The permit shall be reopened and revised under any of the following circumstances:
  - 1. Additional applicable requirements under the Act become applicable to the class I source. Such reopening shall only occur if there are three or more years remaining in the permit term. The reopening shall be completed not later than 18 months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to R18-2-322(B). Any permit revision required pursuant to this subparagraph shall comply with provisions in R18-2-322 for permit renewal and shall reset the five year permit term.
  - 2. Additional requirements, including excess emissions requirements, become applicable

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to an affected source under the acid rain program. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the Class I permit.

3. The Director or the Administrator determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.
  4. The Director or the Administrator determines that the permit needs to be revised or revoked to assure compliance with the applicable requirements.
- C. Proceedings to reopen and issue a permit, including appeal of any final action relating to a permit reopening, shall follow the same procedures as apply to initial permit issuance and shall, except for reopenings under paragraph 1 above, affect only those parts of the permit for which cause to reopen exists. Such reopenings shall be made as expeditiously as practicable. Permit reopenings for reasons other than those stated in Section III.B.1 of this attachment shall not result in a resetting of the five year permit term.

### **IV. POSTING OF PERMIT**

[A.A.C. R18-2-315]

- A. Permittee shall post such permit, or a certificate of permit issuance on location where the equipment is installed in such a manner as to be clearly visible and accessible. All equipment covered by the permit shall be clearly marked with one of the following:
1. Current permit number.
  2. Serial number or other equipment number that is also listed in the permit to identify that piece of equipment.
- B. A copy of the complete permit shall be kept on the site.

### **V. FEE PAYMENT**

[A.A.C. R18-2-326 and 306.A.9]

Permittee shall pay fees to the Director pursuant to A.R.S. § 49-426(E) and A.A.C. R18-2-326.

### **VI. ANNUAL EMISSIONS INVENTORY QUESTIONNAIRE**

[A.A.C. R18-2-327]

- A. Permittee shall complete and submit to the Director an annual emissions inventory questionnaire. The questionnaire is due by March 31 or ninety days after the Director makes the inventory form available each year, whichever occurs later, and shall include emission information for the previous calendar year.
- B. The questionnaire shall be on a form provided by the Director and shall include the information required by A.A.C. R18-2-327.

### **VII. COMPLIANCE CERTIFICATION**

[A.A.C. R18-2-309.2.c and 306.A.5]

- A. Permittee shall submit a compliance certification to the Director twice each year, which

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describes the compliance status of the source with respect to each permit condition. This certification shall be submitted no later than April 15th, and shall report the compliance status of the source during the period between September 16th of the previous year, and March 15th of the current year. The second certification shall be submitted no later than October 15th, and shall report the compliance status of the source during the period between March 16th and September 15th of the current year.

The compliance certification shall include the following:

1. Identification of each term or condition of the permit that is the basis of the certification;
  2. Compliance status of each applicable requirement;
  3. Whether compliance was continuous or intermittent;
  4. Method(s) used for determining the compliance status of the source, currently and over the reporting period;
  5. All instances of deviations from permit requirements reported pursuant to Section XI.B of this Attachment; and
  6. A progress report on all outstanding compliance schedules submitted pursuant to Section XI.C of this Attachment.
- B. A copy of all compliance certification for Class I permits shall also be submitted to the EPA Administrator.

### **VIII. CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**[A.A.C. R18-2-309.3]

Any document required to be submitted by this permit, including reports, shall contain a certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this part shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

### **IX. INSPECTION AND ENTRY**

[A.A.C. R18-2-309.4]

The permittee shall allow the Director or the authorized representative of the Director upon presentation of proper credentials to:

- A. Enter upon the permittee's premises where a source is located or emissions-related activity is conducted, or where records are required to be kept under the conditions of the permit;
- B. Have access to and copy, at reasonable times, any records that are required to be kept under the conditions of the permit;
- C. Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

- D. Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the permit or other applicable requirements; and
- E. Record any inspection by use of written, electronic, magnetic and photographic media.

**X. PERMIT REVISION PURSUANT TO FEDERAL HAZARDOUS AIR POLLUTANT STANDARD** [A.A.C. R18-2-304.C]

If this source becomes subject to a standard promulgated by the Administrator pursuant to section 112(d) of the Act, then the permittee shall, within twelve months of the date on which the standard is promulgated, submit an application for a permit revision demonstrating how the source will comply with the standard.

**XI. PERMIT DEVIATION REPORTING**

**A. EXCESS EMISSIONS REPORTING** [A.A.C. R18-2-306.A.5.b, 306.E.3.d, and 310]

- 1. Emissions in excess of an applicable emission limitation contained in Section I of Attachment "B" of this permit shall constitute a violation. For all situations that constitute an emergency as defined in R18-2-306(E), the affirmative defense and reporting requirements contained in that provision shall apply.
- 2. It shall be the burden of the permittee to demonstrate, through submission of the data and information required by this section, that all reasonable and practicable measures within the permittee's control were implemented to prevent the occurrence of excess emissions.
- 3. Excess emissions shall be reported as follows:
  - a. The permittee shall report to the Director any emissions in excess of the limits established by this permit. Such report shall be in two parts as specified below:
    - (1) Notification by telephone or facsimile within 24 hours of the time when the permittee first learned of the occurrence of excess emissions including all available information from paragraph b. of this subsection.
    - (2) Detailed written notification within 72 hours of the notification pursuant to subparagraph (1) of this paragraph.
  - b. Report shall contain the following information:
    - (1) Identity of each stack or other emission point where the excess emissions occurred.
    - (2) Magnitude of the excess emissions expressed in the units of the



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applicable emission limitation and the operating data and calculations used in determining the magnitude of the excess emissions.

- (3) Date, time and duration or expected duration of the excess emissions.
- (4) Identity of the equipment from which the excess emissions emanated.
- (5) Nature and cause of such emissions.
- (6) If the excess emissions were the result of a malfunction, steps taken to remedy the malfunction and the steps taken or planned to prevent the recurrence of such malfunctions.
- (7) Steps taken to limit the excess emissions. If the source's permit contains procedures governing source operation during periods of start-up or malfunction and the excess emissions resulted from start-up or malfunction, the report shall contain a list of the steps taken to comply with the permit procedures.

4. In the case of continuous or recurring excess emissions, the notification requirements of this section shall be satisfied if the source provides the required notification after excess emissions are first detected and includes in such notification an estimate of the time the excess emissions will continue. Excess emissions occurring after the estimated time period or changes in the nature of the emissions as originally reported shall require additional notification pursuant to subsection A.3.a.(2) of this Section.

### 5. EMERGENCY PROVISION

[A.A.C. R18-2-306.E]

- a. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
- b. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of paragraph d of this section are met.
- c. The permittee shall submit notice of the emergency to the Director by certified mail, facsimile or hand delivery within 2 working days of the time when emission limitations were exceeded due to an emergency. This notice shall contain a description of the emergency, any steps taken to mitigate

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emissions, and corrective action taken.

- d. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
  - (1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
  - (2) The permitted facility was at the time being properly operated;
  - (3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
  - (4) The notice was submitted per paragraph c. above.
- e. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- f. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

**B. OTHER PERMIT DEVIATIONS** [A.A.C. R18-2-306.A.5, 306.A.6, and 306.E.3.d]

Permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Prompt reporting shall mean that the report was submitted to the Director by certified mail, facsimile, or hand delivery within two working days of the time the deviation occurred.

- C. For any episode of non-compliance that is reported pursuant to XI.A and XI.B above, and that cannot be corrected within 72 hours, the Permittee is required to submit a compliance schedule to the Director within 21 days of such occurrence. The compliance schedule shall include a schedule of remedial measures, including an enforceable sequence of actions with milestones, leading to compliance with the permit terms or conditions that have been violated.

**XII. RECORD KEEPING REQUIREMENTS** [A.A.C. R18-2-306.A.4]

- A. Permittee shall keep records of all required monitoring information including, but not limited to, the following:
- 1. The date, place as defined in the permit, and time of sampling or measurements;
  - 2. The date(s) analyses were performed;
  - 3. The name of the company or entity that performed the analyses;

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4. A description of the analytical techniques or methods used;
  5. The results of such analyses; and
  6. The operating conditions as existing at the time of sampling or measurement.
- B. Permittee shall retain records of all required monitoring data and support information for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit.

### **XIII. REPORTING REQUIREMENTS**

[A.A.C. R18-2-306.A.5.a]

Permittee shall comply with all of the reporting requirements of this permit. These include all of the following:

- (i) Compliance certifications pursuant to Attachment A, Section VII of this permit.
- (ii) Permit deviation reporting pursuant to Attachment A, Sections XI.A, XI.B, and XI.C of this permit.
- (iii) Reporting requirements listed in Attachment B, Section III of this permit.

### **XIV. DUTY TO PROVIDE INFORMATION**

[A.A.C. R18-2-304.G and 306.A.8.e]

- A. The permittee shall furnish to the Director, within a reasonable time, any information that the Director may request in writing to determine whether cause exists for revising, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Director copies of records required to be kept by the permit. For information claimed to be confidential, the permittee shall furnish an additional copy of such records directly to the Administrator along with a claim of confidentiality.
- B. If the permittee has failed to submit any relevant facts or if the permittee has submitted incorrect information in the permit application, the permittee shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary facts or corrected information.

### **XV. PERMIT AMENDMENT OR REVISION**

[A.A.C. R18-2-318, 319, and 320]

Permittee shall apply for a permit amendment or revision for changes to the facility which do not qualify for a facility change without revision under Section XVI, as follows:

- A. Administrative Permit Amendment (A.A.C. R18-2-318);
- B. Minor Permit Revision (A.A.C. R18-2-319);
- C. Significant Permit Revision (A.A.C. R18-2-320).

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The applicability and requirements for such action are defined in the above referenced regulations.

### **XVI. FACILITY CHANGE WITHOUT PERMIT REVISION**

[A.A.C. R18-2-317]

- A. Permittee may make changes at the permitted source without a permit revision if all of the following apply:
1. The changes are not modifications under any provision of Title I of the Act or under A.R.S. § 49-401.01(17).
  2. The changes do not exceed the emissions allowable under the permit whether expressed therein as a rate of emissions or in terms of total emissions.
  3. The changes do not violate any applicable requirements or trigger any additional applicable requirements.
  4. The changes satisfy all requirements for a minor permit revision under R18-2-319(A).
  5. The changes do not contravene federally enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
- B. The substitution of an item of process or pollution control equipment for an identical or substantially similar item of process or pollution control equipment shall qualify as a change that does not require a permit revision, if it meets all of the requirements of subsections (A) and (C) of this Section.
- C. For each such change under subsections A and B of this Section a written notice by certified mail or hand delivery shall be received by the Director and, for Class I permits, the Administrator, a minimum of 7 working days in advance of the change. Notifications of changes associated with emergency conditions, such as malfunctions necessitating the replacement of equipment, may be provided less than 7 working days in advance of the change but must be provided as far in advance of the change as possible or, if advance notification is not practicable, as soon after the change as possible.

Each notification shall include:

1. When the proposed change will occur.
2. A description of each such change.
3. Any change in emissions of regulated air pollutants.
4. The pollutants emitted subject to the emissions trade, if any.
5. The provisions in the implementation plan that provide for the emissions trade with which the source will comply and any other information as may be required by the

provisions in the implementation plan authorizing the trade.

6. If the emissions trading provisions of the implementation plan are invoked, then the permit requirements with which the source will comply.
7. Any permit term or condition that is no longer applicable as a result of the change.

## **XVII. TESTING REQUIREMENTS**

[A.A.C.R18-2-312]

### **A. Operational Conditions During Testing**

Tests shall be conducted during operation at the normal rated capacity of each unit, while operating at representative operational conditions unless other conditions are required by the applicable test method or in this permit. With prior written approval from the Director, testing may be performed at a lower rate. Operations during startup, shutdown, and malfunctions (as defined in A.A.C. R18-2-101) shall not constitute representative operational conditions unless otherwise specified in the applicable standard.

### **B. Test Plan**

At least 14 calendar days prior to performing a test, the owner or operator shall submit a test plan to the Director, in accordance with A.A.C. R18-2-312.B and the Arizona Testing Manual. This test plan must include the following:

1. test duration;
2. test location(s);
3. test method(s); and
4. source operation and other parameters that may affect test results.

### **C. Stack Sampling Facilities**

Permittee shall provide or cause to be provided, performance testing facilities as follows:

1. Sampling ports adequate for test methods applicable to the facility;
2. Safe sampling platforms;
3. Safe access to sampling platforms; and
4. Utilities for sampling and testing equipment.

### **D. Interpretation of Final Results**

Each performance test shall consist of three separate runs using the required test method. Each run shall be conducted in accordance with the applicable standard and test method. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. If a sample is accidentally lost or conditions occur which are not under the permittee's control and which may invalidate the run, compliance may, upon the Director's approval, be determined using the arithmetic mean of the other two runs.

### **E. Report of Final Test Results**

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A written report of the results of all performance tests shall be submitted to the Director within 30 days after the test is performed. The report shall be submitted in accordance with the Arizona Testing Manual and A.A.C. R18-2-312.B.

**F. Cessation of Testing After the First Run has Started**

If the Director or the Director's designee is not present, tests may only be stopped for good cause. Good cause includes, forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions or other conditions beyond the permittee's control. Termination of any test without good cause after the first run has commenced shall constitute a failure of the test. Supporting documentation which demonstrates good cause must be submitted.

**XVIII. PROPERTY RIGHTS**

[A.A.C. R18-2-306.A.8.d]

This permit does not convey any property rights of any sort, or any exclusive privilege.

**XIX. SEVERABILITY CLAUSE**

[A.A.C. R18-2-306.A.7]

The provisions of this permit are severable. If any provision of this permit is held invalid, the remainder of this permit shall not be affected thereby.

**XX. PERMIT SHIELD**

[A.A.C. R18-2-325]

Compliance with the conditions of this permit shall be deemed compliance with the applicable requirements identified in Attachment "C" of this permit. The permit shield shall not apply to any changes made pursuant to Section XV.B of this Attachment and Section XVI of this Attachment.

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**ATTACHMENT "B": SPECIFIC CONDITIONS**

Air Quality Control Permit No. 1000155

For

***TRANSWESTERN PIPELINE COMPANY - Flagstaff Compressor Station***

**I. EMISSION LIMITS/ STANDARDS**

**A. Turbo-charged & Naturally Aspirated Reciprocating Engines and In-Line Heater**

1. Particulate Matter Standard [A.A.C. R18-2- 719.C.1 and 724.C.1]

Permittee shall not cause, allow or permit the emission of particulate matter, caused by combustion of fuel, from any stationary rotating machinery or any fuel burning operation having a heat input rate of 4200 million Btu per hour or less in excess of the amounts calculated by the following equation:

$$E = 1.02 Q^{0.769} \quad \text{where:}$$

E = the maximum allowable particulate emissions rate in pounds-mass per hour.

Q = the heat input in million Btu per hour.

2. Opacity Standard

a. Permittee shall not cause, allow or permit to be emitted into the atmosphere from any stationary rotating machinery, smoke for any period greater than 10 consecutive seconds which exceeds 40 percent opacity. Visible emissions when starting cold equipment shall be exempt from this requirement for the first ten minutes. [A.A.C. R18-2-719.E]

b. Permittee shall not cause, allow or permit to be emitted into the atmosphere from the In-line heater, smoke which exceeds 15 percent opacity. [A.A.C. R18-2-724.J]

3. Fuel Limitation [A.A.C. R18-2-306.A.2.]

Permittee shall burn only pipeline quality natural gas in the reciprocating engines and in-line heater.

4. Sulfur Content Standard [A.A.C. R18-2-719.J]

The sulfur content of the fuel shall not exceed 0.8 percent by weight.

[This is a material permit condition]

**B. Non-Point Sources**

1. Open Areas, Roadways, and Streets

- a. Visible emissions from open areas, roadways, and streets shall not have an opacity greater than 40% measured in accordance with the Arizona Testing Manual, Reference Method 9.

[A.A.C. R18-2-610]
  - b. Permittee shall implement the following means of reducing air emissions of particulate matter from becoming airborne:
    - (1) Continue to maintain gravel or asphalt paving on areas such as driveways, parking areas, or vacant lots where motor vehicular activity occurs; [A.A.C. R18-2-604.A]
    - (2) Maintain native vegetation on other open areas within the property fence line; [A.A.C. R18-2-604.A]
    - (3) Use adequate wetting agents or dust suppressants on open areas during construction operations, repair operations, demolition activities, clearing activities, and leveling operations, or when any earth is moved or excavated; [A.A.C. R18-2-604.B]
    - (4) Use adequate wetting agents or dust suppressants when roadway is repaired, constructed, or reconstructed; and [A.A.C. R18-2-605.A]
    - (5) Use wetting agents, dust suppressants, or cover the load adequately when transporting material likely to give rise to airborne dust. [A.A.C. R18-2-605.B]
2. Open Burning [A.A.C.R18-2-602]

The Permittee shall not conduct open burning except when permitted to do so by either ADEQ or the local officer delegated the authority for issuance of open burning permits.

## **II. MONITORING AND RECORDKEEPING REQUIREMENTS**

### **A. Turbo-charged & Naturally Aspirated Reciprocating Engines and In-Line Heater**

- 1. Permittee shall monitor daily, the sulfur content and lower heating value of the fuel being combusted in the turbo-charged and naturally aspirated reciprocating engines. This requirement may be complied with by maintaining a copy of that part of the Federal Energy Regulatory Commission (FERC) approved Tariff agreement that limits transmission to pipeline quality natural gas of sulfur content less than 0.8 percent by weight and having a heating value greater than or equal to 970 Btu/ft<sup>3</sup>.

[A.A.C. R18-2-719.I and 306. A.4]
- 2. Permittee shall record the following information pertaining to each one of the reciprocating engines:



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- a. The dates of operation; and
- b. The number of hours of operation on each date.

### B. Non-Point Sources

#### 1. Open Areas, Roadways, and Streets

Permittee shall maintain records of the following

- a. Dates gravel maintenance activities were performed in order to comply with the requirements of I.B.1.b.(1).
- b. Dates on which fresh vegetation was introduced as required.
- c. Dates on which any of the activities listed in I.B.1.b.(3) were performed, and control measures adopted.
- d. Dates on which any of the activities listed in I.B.1.b.(4) were performed, and control measures adopted.
- e. Dates on which any of the activities listed in I.B.1.b.(5) were performed, and control measures adopted.

#### 2. *Open Burning*

The monitoring requirements of Section I.B.2 of this attachment may be complied with by maintaining copies of all open burning permits on file.

- C. Permittee shall keep records of all monitoring information as required under Section XII of Attachment "A" at the site.

### III. REPORTING REQUIREMENTS

[A.A.C. R18-2-306.A.5.a]

- A. Permittee shall notify the Director in writing within 30 days of any changes to the FERC-approved Tariff agreement relating to the fuel sulfur content and lower heating value limits that occur during the term of this permit.
- B. Permittee shall report all six-minute periods in which the opacity of any plume or effluent exceeds 15 percent from the In-Line heater. [A.A.C. R18-2-724.J]
- C. At the time the compliance certifications pursuant to Section VII of Attachment "A" are submitted, the permittee shall submit the following information pertaining to each one of the reciprocating engines:
  - 1. The dates of operation in the six months prior to the reporting date; and
  - 2. The number of hours of operation on each date.
- D. At the time the compliance certifications required by Section VII of Attachment "A" are submitted, the Permittee shall submit reports of all monitoring activities

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required by Section II of this Attachment performed in the six months prior to the date of the report. [A.A.C. R18-2-306.A.5.a]

### **IV. TESTING REQUIREMENTS**

[A.A.C. R18-2-306.A.3]

- A. Permittee shall conduct one performance test on an engine if the cumulative days of operation of the unit during the permit term exceed fifteen days. These performance tests shall be completed within six months prior to this permit expiration. Each set of performance tests shall include all of the pollutants listed in Section IV.B of this Attachment.
- B. The permittee shall use the following EPA reference test methods to conduct performance tests for the specified pollutants:
1. Carbon monoxide. EPA Reference Method 10 shall be used to conduct the tests.
  2. Nitrogen oxides. EPA Reference Method 7E shall be used to conduct the tests.

The permittee may submit an alternate and equivalent test method(s) that is listed in 40 CFR Subpart 60, Appendix A to the Director in any test plan for approval by the Director.

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**ATTACHMENT "C": APPLICABLE REGULATIONS**

Air Quality Control Permit No. 1000155

For

***TRANSWESTERN PIPELINE COMPANY - Flagstaff Compressor Station***

Compliance with the terms contained in this permit shall be deemed compliance with the following federally applicable requirements in effect on the date of permit issuance:

**ARIZONA ADMINISTRATIVE CODE (A.A.C.) TITLE 18, Chapter 2**

**ARTICLE 6      EMISSIONS FROM EXISTING AND NEW NONPOINT SOURCES**

R18-2-601	General
R18-2-602	Unlawful Open Burning
R18-2-604	Open Areas, Dry Washes or Riverbeds
R18-2-605	Roadways and Streets
R18-2-610	Evaluation of Nonpoint Source Emissions

**ARTICLE 7.      EXISTING STATIONARY SOURCE PERFORMANCE STANDARDS**

R18-2-702.B	General Provisions
R18-2-719	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.C.1	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.E	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-719.I	Standards of Performance for Existing Stationary Rotating Machinery
R18-2-724.C.1	Standards of Performance for Fossil-fuel Fired Industrial and Commercial Equipment.
R18-2-724.J	Standards of performance for fossil-fuel fired industrial and commercial equipment.

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**ATTACHMENT "D": EQUIPMENT LIST**

Air Quality Control Permit No. 1000155

For

***TRANSWESTERN PIPELINE COMPANY - Flagstaff Compressor Station***

PERMITTED EQUIPMENT							
Emission Unit I.D.	Description	Manufacturer	Fuel Type	Size*	Serial Number	Model	Date of Mfr.
P1	Turbo-charged Reciprocating Engine	Dresser-Rand	Natural Gas	4000 bhp	616-KVT-151 (EPN 201)	KVT-616	1966
P2	Turbo-charged Reciprocating Engine	Dresser-Rand	Natural Gas	4000 bhp	616-KVT-150 (EPN 202)	KVT-616	1966
P3	Turbo-charged Reciprocating Engine	Dresser-Rand	Natural Gas	4000 bhp	616-KVT-152 (EPN 203)	KVT-616	1966
P4	Reciprocating Engine	Waukesha	Natural Gas	451 bhp	129010 (EPN 221)	LRZ 3520 GU	1966
P5	Reciprocating Engine	Waukesha	Natural Gas	451 bhp	F23053 (EPN 222)	LRZ 3520 GU	1966
P6	Water Bath Inline Heater	Sivalls	Natural Gas	1 MMBtu/hr	EPN HTR-1	IH 4810	1996
F1	Non-point Sources	-	-	-	-	-	-

**ATTACHMENT "E": INSIGNIFICANT ACTIVITIES**

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**Transwestern Pipeline Company - Flagstaff Compressor Station**

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Air Quality Control Permit No. 1000155

For

***TRANSWESTERN PIPELINE COMPANY - Flagstaff Compressor Station***

POTENTIAL EMISSION POINTS CLASSIFIED AS “INSIGNIFICANT ACTIVITIES” PURSUANT TO A.A.C. R18-2-101.54	
S.No.	Description
1.	Tank 1 - Lube Oil 8,820 gal.
2.	Tank 2 - Lube Oil 8,820 gal.
3.	Tank 4 - Ethylene Glycol 5,040 gal.
4.	Tank 5 - Ethylene Glycol 3,150 gal.
5.	Tank 6 - Oily Water 8,820 gal.
6.	Tank 7 - Oily Water 16,080 gal.
7.	Tank 8 - Condensate 23,100 gal.
8.	Tank 9 - Condensate 1,260 gal.
9.	Vents, valves and flanges.